2018

E-Way Bill System

EWB-API - Technical Document for
Tax Payers / Transporters / GST Suvidha
Providers

NIC

Changes in this Version (1.01)

1.   The 'Generate e-way bill' and 'update Vehicle Number' APIs respond with the additional information of Validity of the e-way bill.

2.   The additional information 'Vehicle Type' (Regular -R or Over Dimensional Cargo-O) needs to be passed in 'Generate e-way bill' API.

3.   The Get APIs (except Get Cons. EWB) will have additional columns
   a.   Valid Upto – Validity of the e-way bill
   b.   Reject Status – Y in case other party has rejected the e-way bill
   c.   Extended times – No of times the e–way bill has got the extension
   d.   delPlace – Delivery Place of the e-way bill
   e.   Status – whether e-way bill is Active (ACT) or Cancelled (CNL)

4.   Schema for the JSON data has been provided

5.   Sample .NET CODE for Encryption and Decryption functions have been provided

6.   Sample Java Code for Encryption and Decryption functions have been provided

7.   Changed Master codes for Unit Quantity Code, State Code, and Document Type have been provided. They match with the GSTN Codes.

8.   New master codes have been added.

9.   Error Codes have been improved.

10.   URL and version has been changed.

11.   Compulsory fields are limited to Web page.

Table of Contents

List of Abbreviations

Abbreviation	Full Form
API	Application Program Interface
CGST	Central Goods and Service Tax
CKD	Completely Knocked Down
EBN	e-way bill Number
EWB	e-way bill
GSP	Goods and Services Tax Suvidha Provider
GST	Goods and Services Tax
GSTIN	Goods and Services Tax Identification No
GSTN	Goods and Services Tax Network
GSTR-1	Goods and Services Tax Form -1
HSN	Harmonized System of Nomenclature
ICT	Information and Communication Technology
IGST	Integrated Goods and Services Tax
IT	Information Technology
MIS	Management Information System
NIC	National Informatics Centre
OTP	One Time Password
PAN	Permanent Account Number
QR	Quick Response
RFID	Radio-Frequency identification Device
SGST	State Goods and Services Tax
SKD	Semi Knocked Down
URL	Uniform Resource Locator

1. Introduction

1.1 Background

Introduction of Goods and Services Tax (GST) across India with effect from 1st of July 2017 is a very significant step in the field of indirect tax reforms in India. For quick and easy movement of goods across India without any hindrance, all the check posts across the country are abolished. The GST system provides a provision of e-Way Bill, a document to be carried by the person in charge of conveyance, generated electronically from the common portal. To implement the e-Way Bill system, ICT based solution is required. Hence, as approved by the Goods and Services Tax (GST) Council, a web based has been designed and developed by National Informatics Centre and it is being rolled out for the use of taxpayers and transporters. Also, the other modes of e-way bill generation rolled out are SMS based, Android based and API based solutions.

1.2 Purpose and Intended Audience

This document aims to explain the operational and technical procedure on how to use API interface to generate the e-Way Bills by the Tax payers or Transporters.

This document is intended for technical experts or software solutions providers of tax payers or transporters, who are already using a computerized system for generating invoices and also generating a large number of invoices. The best method of EWB generation for such large tax payers, who generate the large number of e-Way Bills, is to build API interface with the E-way bill system. This is site-to-site integration of the systems for e-way Bill generation. In this method, the tax payer system will directly or through GSP request e-way bill to the E-way Bill system while generating invoice and get the e-Way Bill number. This can be printed on the Invoice document and movement of the goods can be started. This avoids duplicate data entry and eliminates data entry mistakes. To use this facility, the tax payers have to request the online for this service.

1.3 Scope

This document covers APIs published by E-way bill system. It includes API description with detailed payloads to be exchanged. The details of various APIs for of Authentication, E-way bill generation, Consolidated E-way bill generation, Vehicle No. updation, Cancellation of e-way bill, Rejection of e-way bill are explained in detail along with sample source code in C# .Net for better understanding for the tax payers and transporters.

This document also includes

- Interface Business Flow Process
- API format and brief details on key payload parameters.
- The attribute level description of each API request and response payload.
- JSON schema and sample JSON payload for respective APIs.
- API data structure Specification
- Sample C#.net code
- Various Master codes and error codes are listed in the Annexures
- JSON Schema

1.4 Related documents to read

- EWB-API Interface User Document – This is available on the web-site of e-way bill system

1.5 URL or Web site address for API for Pre-production

http://ewaybill2.nic.in/ewaybillapi/v1.01

2. API Overview

The EWAYBILL APIs are used to communicate between Tax Payers or Transporters Systems with E-way bill System. This section describes standards and formats which will be used to define API exposed by E-WAY BILL systems. E-WAY BILL APIs will be implemented as RESTFul Web services.

Below table depicts the URI pattern to be used while defining API end points:

2.1   API Format

E-WAY BILL APIs will be published as REST web service over HTTPS.

API URI	http://ewaybill2.nic.in/ewaybillapi/v1.01	
HTTP Method	GET	To fetch data from E-WAY BILL
	POST	To submit data to E-WAY BILL

Table 1.   API Format

3. Business Process Flow

3.1 Authentication Token request service

```
                    ┌──────────────┐
                    │    START     │
                    └──────────────┘
                           │
                           ▼
          ┌────────────────────────────────────┐
          │ TP System to check availability of │
          │     valid token in his system      │
          └────────────────────────────────────┘
                           │
                           ▼
                    ╱──────────────╲
                   ╱  If available  ╲
                  ╱    & Valid        ╲      YES
                  ╲ (generated within ╱ ─────────────┐
                   ╲  last 6 hours)? ╱               │
                    ╲──────────────╱                 │
                           │                         │
                          No                         │
                           ▼                         │
          ┌────────────────────────────────────┐     │
          │ TP system prepare request payload  │◄────┤
          │ for new token with encrypted       │     │
          │ authentication parameters          │     │
          └────────────────────────────────────┘     │
                           │                          │
                           ▼                       ┌─────────┐
          ┌────────────────────────────────┐      │  Send   │
          │ EWB validates authentication   │      │  Error  │
          │ parameters of TP               │      └─────────┘
          └────────────────────────────────┘           ▲
                           │                            │
                           ▼                    No      │
                    ╱──────────────╲ ───────────────────┘
                   ╱ Authentication ╲
                   ╲  successful?   ╱
                    ╲──────────────╱
                           │
                          Yes
                           ▼
          ┌────────────────────────────────────┐
          │ EWB system generates new TOKEN and │
          │ sends to TP System                 │
          └────────────────────────────────────┘
                           │
                           ▼
          ┌────────────────────────────────────┐
          │ TP System gets new TOKEN stores    │
          │ into local DB for further use      │
          └────────────────────────────────────┘
                           │
                           ▼
                    ┌──────────────┐
                    │    STOP      │
                    └──────────────┘
```

3.2 Business Process Flow – Other request Services

```
                          ┌──────────┐
                          │  Start   │
                          └────┬─────┘
                               │
                               ▼
          ┌────────────────────────────────┐
          │ TP System encrypted requests   │
          │ for service from EWB API       │
          │ Service                        │
          └────────────────────────────────┘
                               │
                               ▼
          ┌────────────────────────────────┐        ┌──────────────────┐
          │ EWB checks for validity of     │        │  TP system calls │
          │ token and requests             │        │ the authentication│
          └────────────────────────────────┘        └──────────────────┘
                               │
                               ▼
                        ◇ Is token valid? ◇ ──── No ────┐
                               │
                              Yes
                               │
                               ▼
          ┌────────────────────────────────┐
          │ EWB system processes request   │
          │ and return the result to TP    │
          └────────────────────────────────┘
                               │
                               ▼
          ┌────────────────────────────────┐
          │ TP System reads and decrypts   │
          │ result and uses it             │
          └────────────────────────────────┘
                               │
                               ▼
                          ┌──────────┐
                          │   STOP   │
                          └──────────┘
```
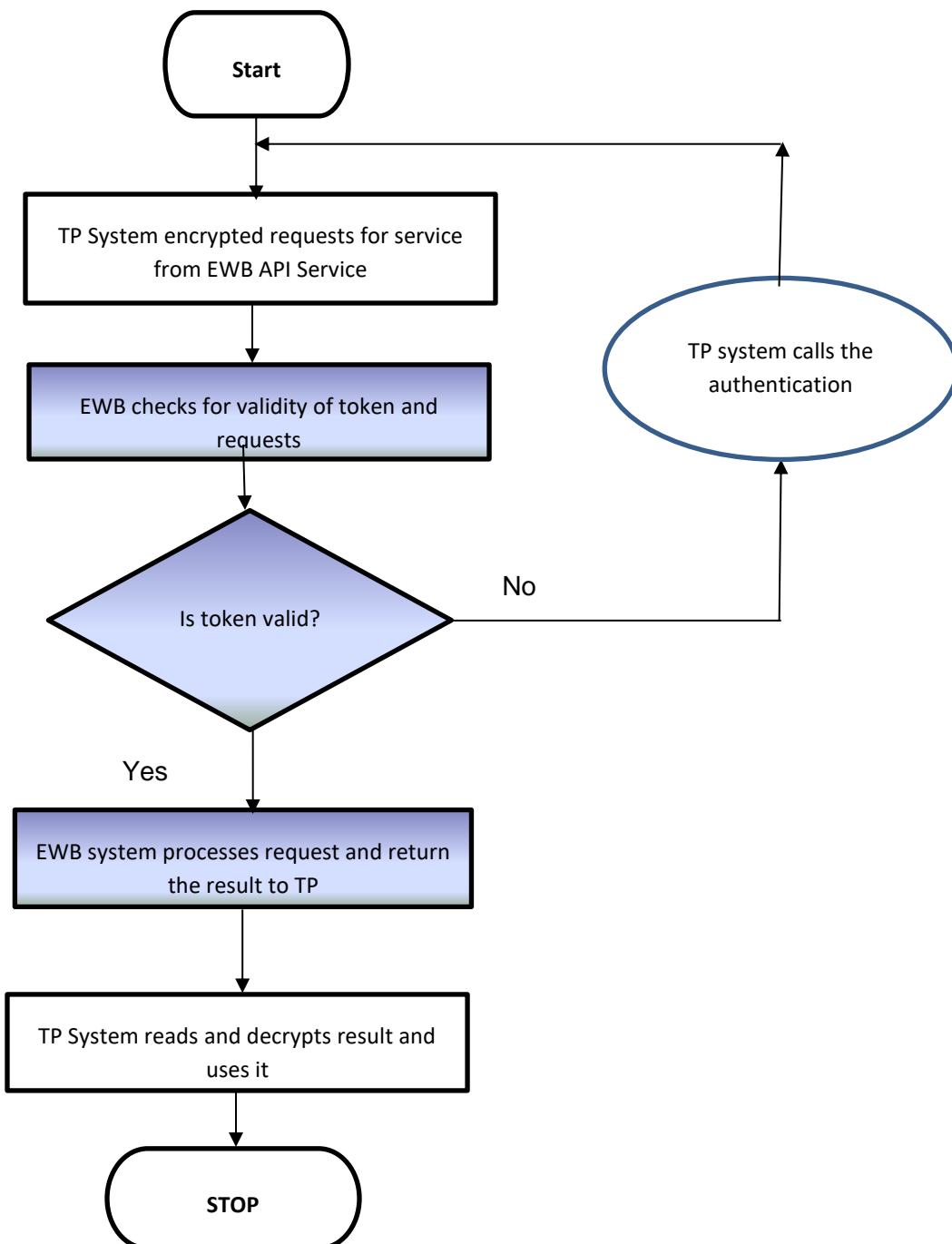
4. List of E-Way Bill API Services/Methods

Sl No.	API Service	API Description
1	Authenticate	Authenticate with the credential to access the APIs
2	Get e-Way Bill	Get the e-way bill details based on EWB Number, generated by you
3	Get e-way bills assigned for transportation – for a day	Get the list of e-way bills assigned to you (requesting GSTIN) as transporter for transportation for particular generated date. This is used for Updating Part-B.
4	Get e-way bills assigned for transportation – by GSTIN	Get the list of e-way bills assigned to you (requesting GSTIN) for transportation by particular tax payer (GSTIN) and generated date. This is used for Updating Part-B.
5	Get e-way bills generated by other party	Get the list of e-way bills generated by other party on your name (requesting GSTIN) based on generated date. This is used for rejecting purpose.
6	Get Consolidated E-Way Bills	Get the Consolidated e-Way Bill details based on consolidated EWB Number, generated by you.
7	Generate E-Way Bill	Generate e-Way Bill
8	Update Part-B/ Vehicle Number for E-Way Bill	Update new vehicle number for the e-way Bill
9	Cancel E-Way Bill	Cancel the e-Way Bill
10	Reject E-Way Bill	Reject the e-Way Bill
11	Generate Consolidate E-Way Bill	Generate Consolidated e-Way Bill

5. Authentication API

5.1 Overview

To access the API, application should first authenticate using the credentials shared and get the access token issued. Same access token to be used to access subsequent APIs. Access token will be configured to expire after 360 minutes. On expiry, same authentication API needs to be invoked to get new Access Token issued.

The API header information is used for authentication and authorization purpose.
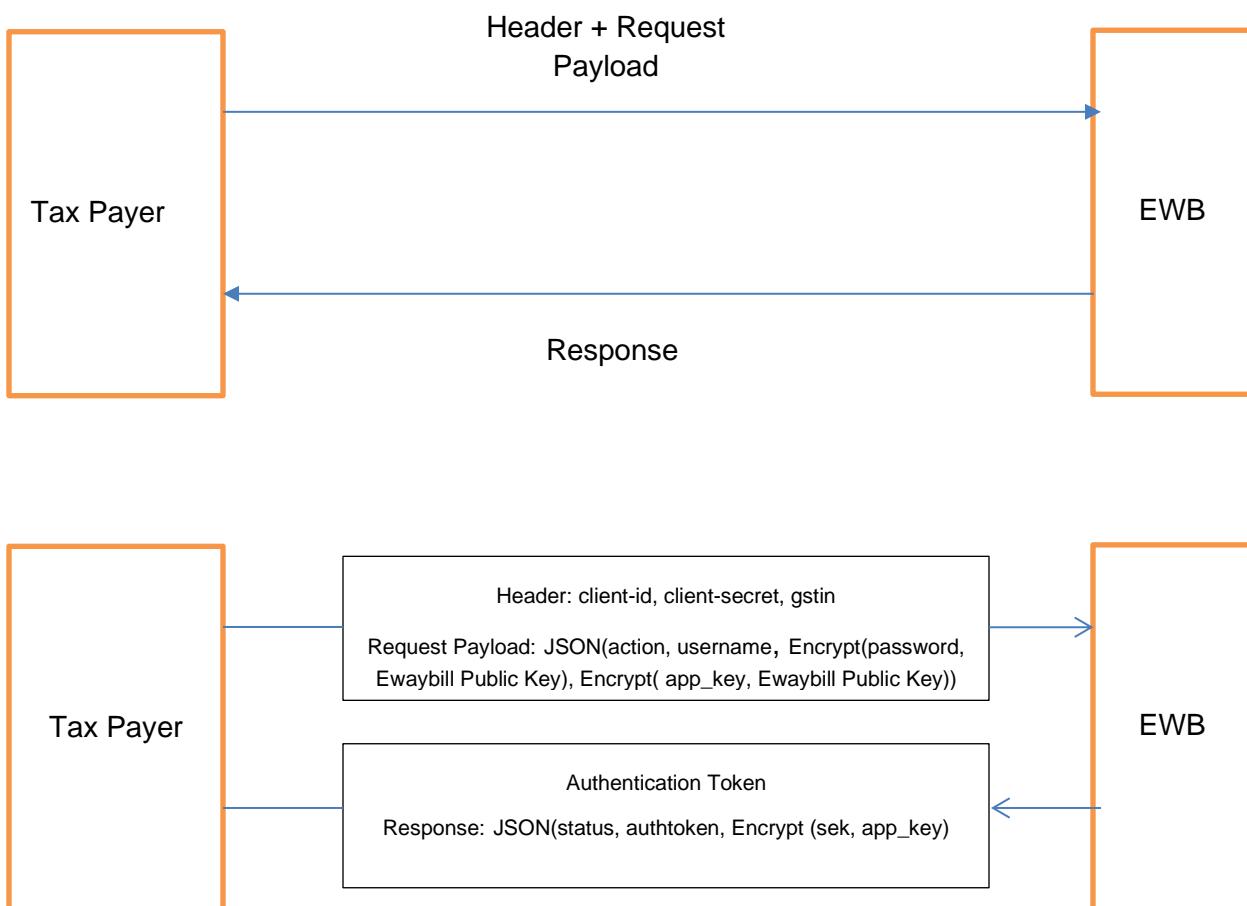
Figure 1. Sequence Diagram Authentication API

5.2 Specification

The format and details of a sample API request is depicted in following table.

URL	http://ewaybill2.nic.in/ewaybillapi/v1.01/authenticate/
Content-Type	application/json
Method	POST

Request Header

Attributes	Description
client-id	Client_id to be provided by E-WAY BILL SYSTEM
client-secret	Secret to be provided by E-WAY BILL SYSTEM
Gstin	GSTIN of the requesting Tax Payer

Request Payload

Attributes	Description	Value
action		ACCESSTOKEN
username	Username of Tax payer as created on Ewaybill portal for API Integration (Tax payer will use the option Mainmenu->Registration->GSP to register under GSP OR Tax payer will use the option Mainmenu->Registration->API to register directly for API Interface)	
password	Password of Tax payer as in Ewaybill portal for API Integration	
app_key	Any 32 character random unique id generated by user identifying unique user session. App_key will be encrypted using Public key of E-WAY BILL using RSA algorithm	

Response Payload

Attributes	Description	Values
status	Status of Authentication request	0 – for Failure; 1 – for Success
authtoken	Authorization token is a universally unique identifier (UUID).	Eg: 30431124-5cbd-4045- 9840-4ebb18d70265",
sek	Session Encryption key (SEK) is a 32 bit random secure key generated using AES 256 algorithm in the EWB system App_key will be used as key to encrypt the Session Encryption key (SEK) using AES 256 (AES/ECB/PKCS7Padding) algorithm	Eg: "IaxLuJcsqILZuYQX828ITxXlrRUM1ebdEIaqEX nlaK+xK/U7ZuM5xAayg7RB7mWp

Sample JSON

Authentication Request

```
{
"action":"ACCESSTOKEN",
"username":"nictexxst",
"password":"rjPf8Rr4Gjh9qvSDfoqOqyHPW+ ==",
"app_key":"e1d65bgSeTrTatc7atLhKWyUbM/ekfbAWu2dFMfyNuYS+ =="
}
```

Authentication Response

```
{
"status":"1",
"authtoken":"a30WKqvWdLMkPH6M5V9X4AY",
"sek":"crdHoP73uRaLwSsg4o8RZCHgVrfydvF2K5IW3+kc/rI5SqOVJ52Thf1yCI4j"
}
```

6. Generate E-way bill - API
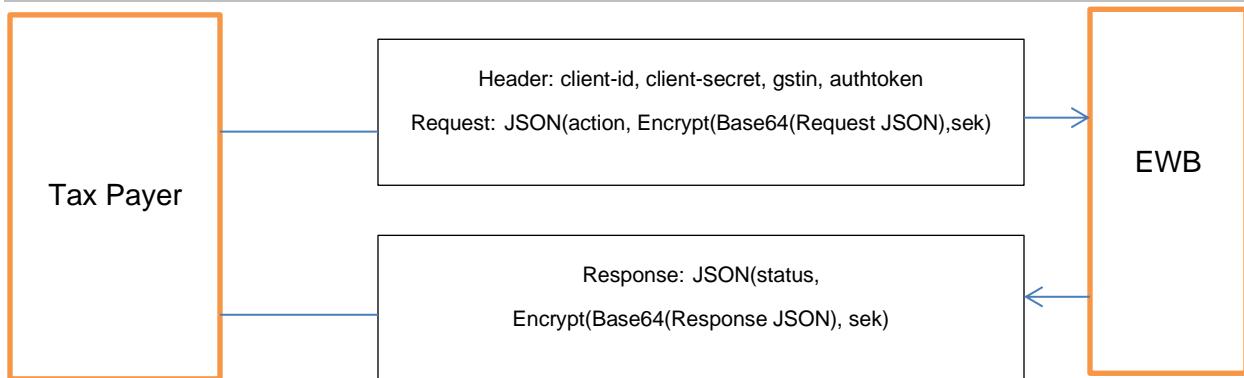
Figure 2. Sequence Diagram: E-WAY BILL GENERATION API

The format and details of a Generate E-way bill API request is depicted in following table.

URL	http://ewaybill2.nic.in/ewaybillapi/v1.01/ewayapi/
Content-Type	application/json
Method	POST

Request Header

Attributes	Description
client-id	Client-id to be provided by E-WAY BILL SYSTEM
client-secret	Secret to be provided by E-WAY BILL SYSTEM
gstin	GSTIN of Requester(Tax payer or Transporter)
authtoken	Authentication token returned by the E-way bill system

Request Payload

Attributes	Description	Values
action		GENEWAYBILL
Encrypt (Base64(Request JSON),sek)	Encrypted E-way bill JSON string	

Response Payload

Attributes	Description	Value
status	Status of request	0 – for Failure ;1 – for Success
Encrypt(Base64(Response JSON),sek)	Response of E-way bill JSON string, The response will have eway bill number and generated date if it is successfully generated. Otherwise the response will have error codes	

SAMPLE JSON

Generate E-WAY BILL Request

```
{

"action":"GENEWAYBILL",
"data": "
iJiJGXqU1pcj7lUobPrYFVPaeiD0OGPaB3lVFNTXTMiHpW7VUcvgSWGXsGETQU4v3RuT23wXUVcZnrglGHjXV10rh8Ds
UZO+kufS5MMF+E1RcTRJN70TeDPd3Ya84X6+ijRcPFJUJyjvLD2muWYF+UixgkaNybUDK2eQ9IKPtabvsblCRCjVISuNjM
fV0nrjtqYSWT8fcTk323OxYaqPhGWH/9T24vE8NnkNWUjlpfwPgFkiVKZ2xVcLESXGYSnffA6UBZPng/tBj/qk6EXsNjeC6
/P7E+KOKin7aeNw83MOmlnGi/zPIm3pOoBG9w6Bj5ZfDWFssjHpBNWw6isecadXLIllvtjkVzZ+cDOxWYw8AaYWLItgA
y5ZUxyxBlRpv+lWMVarsfHimL+GYX3zo3hOWvQ8VfYPW/5qRoFsPL4aYJgaR5kHrw+yl672jIuoj1iZ5Qf3nDeFWrotBVD
jrmON/IlckqoL3ATBf6nmpybyMJrSGdjQikNrO/2/+F5nJLTILwru6x2XD6r45v9v6aJXE13QWHE84E6wcloNGOObvUBV
+/BadIn4zqXr48eIGmjGJ4p9OTnqyzaecHnKOOpfX3SIaHJKnEUx97OZ2ErAHAPI7OtWled92lzzH/2sue6C5W4q27Jt5SF
jr2Tyxxz3WUiJ58BKLSfs4kVHmLJXROoXsSplgRVG04QpiL80ticEafWoCbAVhBC2Xkabkc8GmTFg5ak9VZxNh9vdAZbJ5z
L0K+3fw8osIYG8CermgPkQUaQo2kpK/gEkINapvxbvTLqrVrV171aHUdFk5PW2G2nc9N0uPi0nplxz/habvDgkRQPFr+M
JjAA437/Y7HnI5B34jMk3EhtqWHZNLNAf6HuMK0pl5boJtSl4qfpXpjg5uUAoAPA0/gXc3l4VOsR1NpqOI1zjSxraW5sJB5
3USaEqdunQNrDpr/GQITARl/D86gZoMf+Bi7Jdt108AI7EK0mYALn4gMvy1I3gDCQ+NXl5wStfCO1ih/OrL2wfihoH8bHF
eW6xxCgvbenLxrAQfhiBkgAQkp2wXsHNxW4JbNh5rDlwc1VqP63WQ7/QVIkRGe/HS6uOn5JVlUNvKVNWIe6Qpm8eT
hMD/GEL1IJAV6oQOr7+OOEn2oIR7olJ5yu652iH6tq0Xcx2C0ZmhHRms54w5bVWZu+/bOhMptSKIs/N67JGJ8hj85E2+
yOgwdTn+Nvi+W7d2W3jVFF7XP7+CbfxZdi5RVyir4fddH8YbsLzj9FjP1uRcBqK2egzQ90UWKXCtqCi6QMORfFu5LDgw
MCNJ75TH+1nVRaeXYhVDAQEeYWkG2yKVfME0BUoHQ54w5a0M1XoxMi9wU9LbuCAt5UG2wi39x2gKc78IddcABdt
wx2K23hdoUZp/25Y "

}
```

"data" JSON corresponds to the data element of Generate E-WAY BILL Request above

```
{
"supplyType":"O",
"subSupplyType":"1",
"docType":"INV",
"docNo":"123-8",
"docDate":"15/12/2017",
"fromGstin":"29AAACG0569P1Z3",
"fromTrdName":"welton",
"fromAddr1":"2ND CROSS NO 59  19  A",
```

```
"fromAddr2":"GROUND FLOOR OSBORNE ROAD",
"fromPlace":"FRAZER TOWN",
"fromPincode":560042,
"fromStateCode":29,
"toGstin":"02EHFPS5910D2Z0",
"toTrdName":"sthuthya",
"toAddr1":"Shree Nilaya",
"toAddr2":"Dasarahosahalli",
"toPlace":"Beml Nagar",
"toPincode":689788,
"toStateCode":28,
"totalValue":5609889,
"cgstValue":0,
"sgstValue":0,
"igstValue":168296.67,
"cessValue":224395.56,
"transporterId":"",
"transporterName":"",
"transDocNo":"",
"transMode":"1",
"transDistance":"656",
"transDocDate":"",
"vehicleNo":"PVC1234",
"vehicleType":"R",
"itemList":
[{
"productName":"Wheat",
"productDesc":"Wheat",
"hsnCode":1001,
"quantity":4,
"qtyUnit":"BOX",
"cgstRate":0,
"sgstRate":0,
"igstRate":3,
"cessRate":4,
"cessAdvol":0,
"taxableAmount":5609889
}
]
}
```

Generate E-WAY BILL Response

```
{
"status":"1",
```
"**data**":"ew0KCSJld2F5QmlsbE5vIjogMTIzNDU2Nzg5LA0KCSJld2F5QmlsbERhdGUiOiAiMTYgLyAwOS AvIDIwMTcgMTA6IDMwOiAwMCBBTSINCn0="

}

"data" JSON corresponds to the data element of Generate E-WAY BILL Response(Success) above

```
{
"ewayBillNo":123456789,
"ewayBillDate":"16/09/2017 10:30:00 AM",
"validUpto":"17/09/2017 12.00:00 PM"
}
```

JSON(in case of error)

```
{
"status": "0",
"error":{"errorCodes": 240}
}
```

7. UPDATE PART-B/VEHICLE NUMBER - API
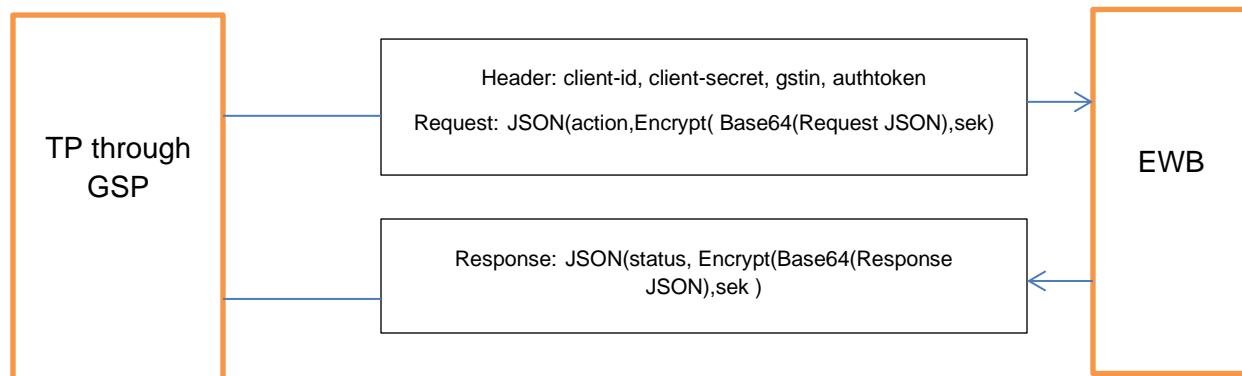
Figure 3. Sequence Diagram: UPDATE VEHICLE API Invocation

The format and details of a Vehicle No. Updation API request is depicted in following table.

URL	http://ewaybill2.nic.in/ewaybillapi/v1.01/ewayapi/
Content-Type	application/json
Method	POST

Request Header

Attributes	Description
client-id	clientid to be provided by EWAYBILL SYSTEM
client-secret	Secret to be provided by EWAYBILL SYSTEM
gstin	GSTIN of Requester(Tax payer or Transporter)
authtoken	Authentication token returned by the E-way bill system

Request Payload

Attributes	Description	Value
action		**VEHEWB**
Encrypt(Base64(Request JSON),sek)	Vehicle Update JSON string	

Response Payload

Attributes	Description	Values
status	Status of request	1-Success;0-Error
Encrypt(Base64 (Response JSON),sek)	Response of Update Vehicle JSON string, The response will have vehicle number and updated date if it is successfully updated. Otherwise the response will have error codes	

Sample JSON

UPDATE VEHICLE Request

{
"action":" VEHEWB ",
"**data**":
"ew0KCSJFd2JObyI6IDExMTAwMDYwOTI4MiwNCgkiVmVoaWNsZU5vIjogIlBRUjEyMzQiLA0KCSJGcm9tU
GxhY2UiOiAiQkFOR0FMT1JFIiwNCgkiRnJvbVN0YXRlIjogMjksDQoJIlJlYXNvbkNvZGUiOiAiMSIsDQoJIlJlYXN
vblJlbSI6ICJ2ZWhpY2xlIGJyb2tlIGRvd24iLA0KCSJUcmFuc0RvY05vICI6ICIxMjM0ICIsDQoJIlRyYW5zRG9jRGF
0ZSAiOiAiMTIvMTAvMjAxNyAiLA0KCSJUcmFuc01vZGUiOiAiMSINCn0="
}

"data" JSON corresponds to the data element of UPDATE VEHICLE Request above

```
{
  "EwbNo": 111000609282,
  "VehicleNo": "PQR1234",
  "FromPlace": "BANGALORE",
  "FromState": 29,
 "ReasonCode": "1",
  "ReasonRem": "vehicle broke down",
  "TransDocNo ": "1234 ",
  "TransDocDate ": "12/10/2017 ",
   "TransMode": "1"
}
```

UPDATE VEHICLE Response

{
"status":"1",
"**data**":"ew0KInZlaFVwZERhdGUiOiIxNS8xMi8yMDE3IDEwOjU2OjAwIEFNIg0KfQ0K"
}

"data" JSON corresponds to the data element of UPDATE VEHICLE Response(Success) above

```
{
"vehUpdDate":"15/12/2017 10:56:00 AM",
```

"validUpto":"17/09/2017 12.00:00 PM"
}

JSON(in case of error)

{
"status": "0",
"error":{"errorCodes": 240}
}

8. GENERATE CONSOLIDATED EWAYBILL
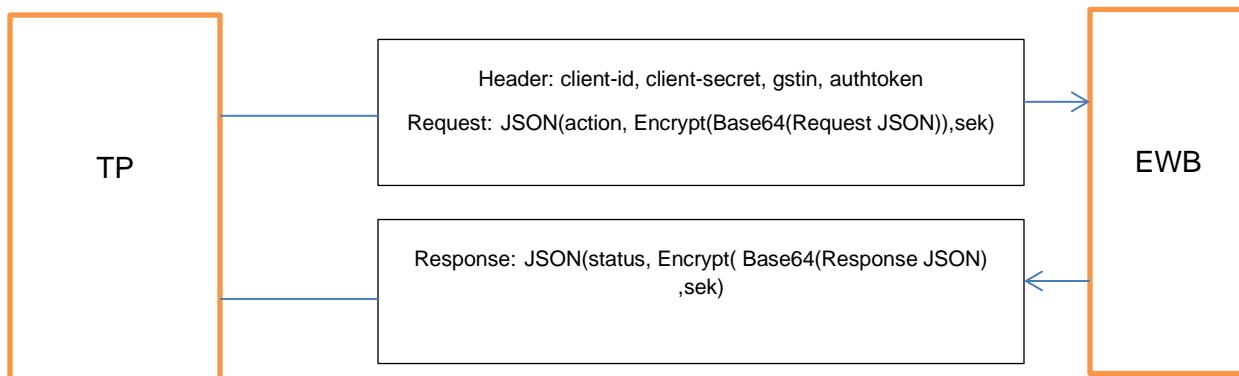
Figure 3. Sequence Diagram: CONSOLIDATED E-WAY BILL GENERATION API Invocation

The format and details of Consolidated E-way bill API request is depicted in following table.

URL	http://ewaybill2.nic.in/ewaybillapi/v1.01/ewayapi/
Content-Type	application/json
Method	POST

Request Header

Attributes	Description
client-id	clientid to be provided by E-WAY BILL SYSTEM
client-secret	Secret to be provided by E-WAY BILL SYSTEM
Gstin	GSTIN of Requester(Tax payer or Transporter)
authtoken	Authentication token returned by the E-way bill system

Request Payload

Attributes	Description	
Action		GENCEWB
Encrypt(Base64(Request JSON),sek)	Consolidated E-way bill JSON string	

Response Payload

Attributes	Description	Value
Status	Status of request	1-Success ; 0-Error
Encrypt(Base64(Response JSON),sek)	Response of Consolidated E-way bill JSON string. The response will have consolidated eway bill number and generated date if it is successfully generated. Otherwise the response will have error codes	

Sample JSON

Generate Consolidated E-WAY BILL Request

{
"action":"GENCEWB",
"**data**":"
ew0KICANCiAgImZyb21QbGFjZSI6ICJCQU5HQUxPUkUgU09VVEgiLA0KICAiZnJvbVN0YXRlIjogIjI5IiwNCiAgI
nZlaGljbGVObyI6ICJLQTEyQUIxMjM0IiwNCiAgInRyYW5zTW9kZSI6ICIxIiwNCiAgInZzZXJwc3RpbiI6ICIyOUF
BQUNHMDU2OVAxWjMiLA0KICAidXNlcklkIjogIkFNQlVKVKQU5FMzIiLA0KICAidHJpcFNoZWV0RXdiQmlsbH
MiOiBbDQogICAgew0KICAgICAgImV3Yk5vIjogMTExMDAwNjA5MjgyDQogICAgfSwNCiAgICB7DQogICAgIC
AiZXdiTm8iOiAxODEwMDA2MDkyNzANCiAgICAgIB9DQogIF0NCn0= "
}

"data" JSON (corresponds to the data element of Generate Consolidated E-WAY BILL Request)

```
{
  "fromPlace": "BANGALORE SOUTH",
  "fromState": 29,
  "vehicleNo": "KA12AB1234",
  "transMode": "1",
  "TransDocNo":"1234",
  "TransDocDate":"12/10/2017",
  "tripSheetEwbBills": [
    {    "ewbNo": 111000609282   },
    {    "ewbNo": 181000609270   }
]}
```

Generate Consolidated E-WAY BILL Response

{
"status":"1",
"**data**":"ew0KImNFd2JObyI6IjE4MTAwMDAzODciLA0KImNFV0JEYXRlIjoiMTUvMTIvMjAxNyAxMDoyNzow
MCBBTSINCn0NCg0K"}

"data" JSON corresponds to the data element of Generate Consolidated EWB Response(Success) above

```
{
"cEwbNo":1810000387,
"cEWBDate":"15/12/2017 10:27:00 AM"
}
```

JSON(in case of error)

```
{
"status": "0",
"error":{"errorCodes": 240}
}
```

9. CANCEL E-WAY BILL
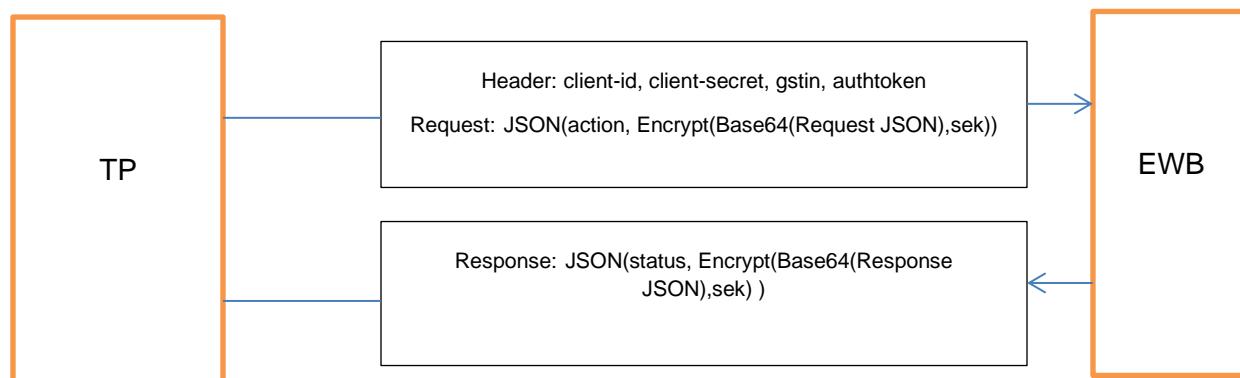
Figure 4. Sequence Diagram: Cancellation of E-WAY BILL API Invocation

The format and details of Cancellation of E-way bill API request is depicted in following table.

URL	http://ewaybill2.nic.in/ewaybillapi/v1.01/ewayapi/
Content-Type	application/json
Method	POST

Request Header

Attributes	Description
client-id	clientid to be provided by E-WAY BILL SYSTEM
client-secret	Secret to be provided by E-WAY BILL SYSTEM
gstin	GSTIN of Requester(Tax payer or Transporter)
authtoken	Authentication token returned by the E-way bill system

Request Payload

Attributes	Description	
action	CANEWB	CANEWB
Encrypt(Base64(Request JSON),sek)	Cancelled E-way bill JSON string.	

Response Payload

Attributes	Description	Value
status	Status of request	1 – Success; 0 - Error
Encrypt(Base64(Response JSON),sek)	Response of Cancelled E-way bill JSON string. The response will have cancelled eway bill number and cancelled date if it is successfully cancelled. Otherwise the response will have error codes	

Sample JSON

CANCEL E-WAY BILL Request

```
{
"action":"CANEWB ",
"data":"
```
eyAgDQoiZXdiTm8iOiAxMTEwMDA2MDkyODIsDQogImNhbmNlbFJzbkNvZGUiOiAyLA0KImNhbmNlbFJtcmsiOiAiQ2FuY2VsbGVkIHRoZSBvcmRlciINCn0NCg== "
```
}
```

"data" JSON (corresponds to the data element of Cancel E-WAY BILL Request)

```
{
"ewbNo": 111000609282,
 "cancelRsnCode": 2,
"cancelRmrk": "Cancelled the order"
}
```

Cancel E-WAY BILL Response

```
{
"status":"1",
"data":"
```
ew0KCSJld2F5QmlsbE5vIjogIjExMTAwMDYwOTI4MiIsDQoJImNhbmNlbERhdGUiOiAiMTUvMTIvMjAxNyAxMTozNTowMCBBTSINCn0= "
```
}
```

"data" JSON (corresponds to the data element of Cancelled EWB Response(Success))

```
{
  "ewayBillNo": 111000609282,
  "cancelDate": "15/12/2017 11:35:00 AM"
}
```
JSON(in case of error)
```
{
"status": "0",
"error":{"errorCodes": 240}
}
```

10. REJECT EWAYBILL
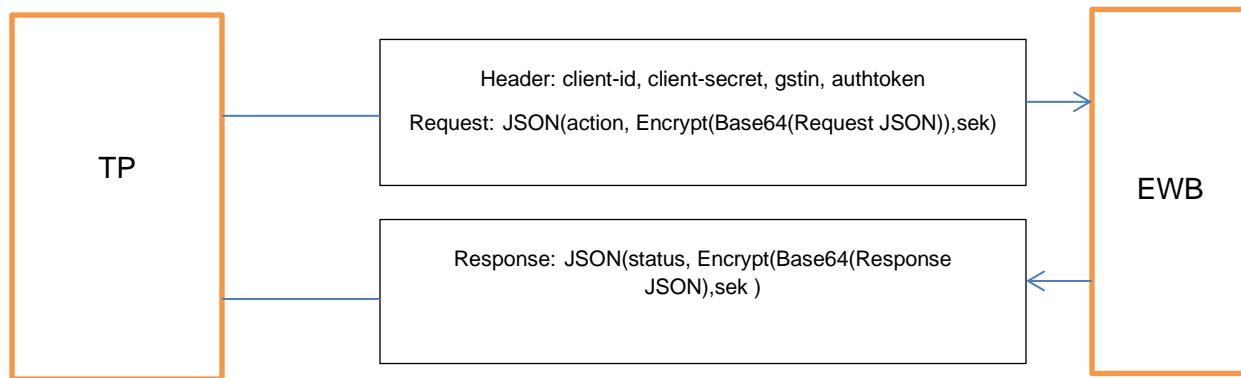
Figure 5. Sequence Diagram: Reject E-WAY BILL API Invocation

The format and details of Reject E-way bill API request is depicted in following table.

URL	http://ewaybill2.nic.in/ewaybillapi/v1.01/ewayapi/
Content-Type	application/json
Method	POST

Request Header

Attributes	Description
client-id	clientid to be provided by E-WAY BILL SYSTEM
client-secret	Secret to be provided by E-WAY BILL SYSTEM
Gstin	GSTIN of Requester(Tax payer or Transporter)
authtoken	Authentication token returned by the E-way bill system

Request Payload

Attributes	Description	
Action	REJEWB	REJEWB
Encrypt(Base64(Request JSON),sek)	Reject E-way bill JSON string.	

Response Payload

Attributes	Description	Value
Status	Status of request	1 – Success ; 0 - Error
Encrypt(Base64(Response JSON),sek)	Response of Reject E-way bill Json string. The response will have rejected eway bill number and rejected date if it is successfully rejected. Otherwise the response will have error codes	

Sample JSON

Reject E-WAY BILL Request

```
{
"action":"REJEWB ",
"data":"ew0KCSJld2JObyI6ICIxODEwMDA2MDkyNzAiDQp9 "
}
```

"data" JSON corresponds to the data element of Reject E-WAY BILL Request above

```
{
   "ewbNo": 181000609270
}
```

Reject E-WAY BILL Response

```
{
"status":"1",
"data":"
ew0KCSJld2F5QmlsbE5vIjogMTgxMDAwNjA5MjcwLA0KCSJld2JSZWplY3RlZERhdGUiOiAiMTUvMTIvMjAx
NyAxMDoyNDowMCBBTSINCn0="
}
```

"data" JSON (corresponds to the data element of Reject EWB Response(Success))

```
{
  "ewayBillNo": 181000609270,
  "ewbRejectedDate": "15/12/2017 10:24:00 AM"
}
```

JSON(in case of error)

```
{
"status": "0",
"error":{"errorCodes": 240}
}
```

11. GET EWAYBILL DETAILS

This method provideS the eway bill details for a given eway bill number.

The format and details of GetEwayBilll API request is depicted in following table.

URL	http://ewaybill2.nic.in/ewaybillapi/v1.01/ewayapi/GetEwayBill
Content-Type	application/json
Method	GET
URL Parameters	ewbNo

Request Header

Attributes	Description
client-id	clientid to be provided by E-WAY BILL SYSTEM
client-secret	Secret to be provided by E-WAY BILL SYSTEM
Gstin	GSTIN of Requester(Tax payer or Transporter)
authtoken	Authentication token returned by the E-way bill system

Response Payload

Attributes	Description	Value
Status	Status of request	1 – Success ; 0 - Error
Encrypt(Base64(Response JSON),rek)	Response of E-way bill Json string.	
Encrypt(rek,sek)	Random encryption key which is encrypted using sek	
Hmac (Base64(JSON data))	HMAC-SHA256 of Base64 data using AES key (rek) as HMAC Key	

11.1   Sample Json for GetEwayBill

```
{ "actualDist": 356,
 "cessValue": 127.71,
 "cgstValue": 85.14,
```

```
 "docDate": "16/12/2017",
 "docNo": "esf",
 "docType": "INV",
"fromAddr1": "GHSRaliway StationGollahalliNelamangala",
 "fromAddr2": "Bangalore (Rural)",
 "fromGstin": "29BNMPC3977J1Z2",
 "fromPincode": 562123,
 "fromPlace": "Bangalore (Rural)",
 "fromStateCode": 29,
 "fromTrdName": "CHITRA N",
 "genMode": "MOB",
 "igstValue": 0.00,
 "itemList": [
  {
    "productDesc": "",
    "cessRate": 3.000,
    "cgstRate": 2.000,
    "hsnCode": 1001,
    "igstRate": 0.000,
    "productId": 0,
    "productName": "",
    "qtyUnit": "KGS",
    "quantity": 0.00,
    "sgstRate": 2.000,
    "taxableAmount": 4257.00,
   "itemNo": 1,
    "cessAdvol": 0.00
  }
 ],
"sgstValue": 85.14,
 "status": "ACT",
 "subSupplyType": "1  ",
 "supplyType": "O",
 "toAddr1": "",
 "toAddr2": "",
 "toGstin": "29AMRPV8729L1Z1",
 "toPincode": 560043,
 "toPlace": "",
 "toStateCode": 29,
 "toTrdName": "",
 "totalValue": 4257.00,
 "transDocDate": "16/12/2017",
```

```
"transDocNo": "",
"transMode": "1  ",
"VehicleType":"R",
"transporterId": "",
"transporterName": "",
"userGstin": "29BNMPC3977J1Z2",
 "ewbNo": 191009891462,
"ewayBillDate": "18/01/2018 10:20:00 AM",
 "validUpto":"17/09/2017 12.00:00 PM",
 "extendedTimes":0,
 "rejectStatus": "N",
"VehiclListDetails": [
 {
   "updMode": "MOB",
   "vehicleNo": "KA12WE7006",
   "fromPlace": "Bangalore (Rural)",
   "fromState": 29,
   "tripshtNo": 0,
   "userGSTINTransin": "29BNMPC3977J1Z2",
  "transMode": "1 ",
   "transDocNo":"1234",
   "transDocDate": "12/12/2017"
 }
]
}
```

12. GET EWAY BILL ASSIGNED TO YOU (REQUESTING GSTIN) FOR A TRANSPORTATION – PARTICULAR DATE

This method provides thel ist of eway bills assigned for a transporter based on generated date.

The format and details of GetEwayBillsForTransporter API request is depicted in following table.

URL	http://ewaybill2.nic.in/ewaybillapi/v1.01/ewayapi/GetEwayBillsForTransporter
Content-Type	application/json
Method	GET
URL Parameters	date
URL Parameter Desc	date – E-way bill generated Date

Request Header

Attributes	Description
client-id	clientid to be provided by E-WAY BILL SYSTEM
client-secret	Secret to be provided by E-WAY BILL SYSTEM
gstin	GSTIN of Requester(Transporter)
authtoken	Authentication token returned by the E-way bill system

Response Payload

Attributes	Description	Value
status	Status of request	1 – Success ; 0 - Error
Encrypt(Base64(Response JSON),rek)	Response of E-way bill assigned to a transporter Json string.	
Encrypt(rek,sek)	Random encryption key which is encrypted using sek	
Hmac (Base64(JSON data))	HMAC-SHA256 of Base64 data using AES key (rek) as HMAC Key	

12.1.1 Sample JSON for GetEwayBillsForTransporter

```
[{ "ewbNo": 151000256262,
 "ewbDate": "10/12/2017 10:45:00 AM ",
   "genGstin": "29AMRPV8729L1Z1",
  "docNo": "",
   "docDate": "22/09/2017",
  "delPlace":"Bangalore",
   "delPinCode": 560056,
   "delStateCode": 29,
 "validUpto":"17/12/2017 12.00:00 PM",
 "extendedTimes":0,
 "Status": "ACT",
 "rejectStatus":"Y"
 },
{   "ewbNo": 121000359898,
   "ewbDate": "10/12/2017 10:45:00 AM ",
   "genGstin": "29AAECP2371C1ZL",
   "docNo": "TA120",
   "docDate": "20/09/2017",
  "delPlace":"Bangalore",
   "delPinCode": 560013,
   "delStateCode": 29
 "validUpto":"17/12/2017 12.00:00 PM",
 "extendedTimes":0,
 "Status": "ACT",
 "rejectStatus":"Y"
}
]
```

13.   GET EWAY BILL ASSIGNED TO YOU (REQUESTING GSTIN) FOR TRANSPORTATION – PARTICULAR GSTIN and DATE

This method provides the list of E-way bills assigned for a requesting transporter by a given GSTIN based on generated date.

The format and details of GetEwayBillsForTransporterByGstin API request is depicted in following table.

URL	http://ewaybill2.nic.in/ewaybillapi/v1.01/ewayapi/GetEwayBillsForTransporterByGstin
Content-Type	application/json
Method	GET
URL Parameters	Gen_gstin, date
URL Parameter Description	Gen_gstin – GSTIN of E-way bill generator date – E-way bill generated Date Parameters needs to be passed in the order in which it is listed

Request Header

Attributes	Description
client-id	clientid to be provided by E-WAY BILL SYSTEM
client-secret	Secret to be provided by E-WAY BILL SYSTEM
gstin	GSTIN of Requester(Transporter)
authtoken	Authentication token returned by the E-way bill system

Response Payload

Attributes	Description	Value
status	Status of request	1 – Success; 0 - Error
Encrypt(Base64(Response JSON),rek)	Response of E-way bill assigned to a Transporter for a specific GSTIN Json string.	
Encrypt(rek,sek)	Random encryption key which is encrypted using sek	

Hmac (Base64(JSON data))	HMAC-SHA256 of Base64 data using AES key (rek) as HMAC Key	

13.1.1   Sample JSON

```
[
{
  "ewbNo": 151000256262,
  "ewbDate": "10/12/2017 10:45:00 AM ",
  "genGstin": "29AMRPV8729L1Z1",
 "docNo": "",
  "docDate": "22/09/2017",
  "delPinCode": 560056,
  "delStateCode": 29,
  "validUpto":"17/12/2017 12.00:00 PM",
  "extendedTimes":0,
 "delPlace": "Bangalore",
 "Status": "ACT",
 "rejectStatus":"Y"
    },
{   "ewbNo": 121000359898,
  "ewbDate": "10/12/2017 10:45:00 AM ",
  "genGstin": "29AAECP2371C1ZL",
  "docNo": "TA120",
  "docDate": "20/09/2017",
  "delPinCode": 560013,
  "delStateCode": 29  ,
  "validUpto":"17/12/2017 12.00:00 PM",
  "extendedTimes":0,
 "delPlace": "Bangalore",
 "Status": "ACT",
 "rejectStatus":"Y"
} ]
```

14. GET E-WAY BILLS GENERATED ON YOU (REQUESTING GSTIN) BY OTHER PARTIES

This method provides the list of E-way bills generated by other parties on your GSTIN. This can be used for rejecting the e-way bill, if required.

The format and details of GetEwayBillsofOtherParty API request is depicted in following table.

URL	http://ewaybill2.nic.in/ewaybillapi/v1.01/ewayapi/GetEwayBillsofOtherParty
Content-Type	application/json
Method	GET
URL Parameters	date
URL Parameter Desc	date – E-way bill generated Date Parameters needs to be passed in the order in which it is listed

Request Header

Attributes	Description
client-id	clientid to be provided by E-WAY BILL SYSTEM
client-secret	Secret to be provided by E-WAY BILL SYSTEM
Gstin	GSTIN of Requester
authtoken	Authentication token returned by the E-way bill system

Response Payload

Attributes	Description	Value
Status	Status of request	1 – Success ; 0 - Error
Encrypt(Base64(Response JSON),rek)	Response of E-way bill generated by other party Json string.	
Encrypt(rek,sek)	Random encryption key which is encrypted using sek	

Hmac (Base64(JSON data))	HMAC-SHA256 of Base64 data using AES key (rek) as HMAC Key	

Sample Json

```
[
{
    "ewbNo": 151000256262,
    "ewbDate": "10/12/2017 10:45:00 AM ",
    "genGstin": "29AMRPV8729L1Z1",
   "docNo": "",
    "docDate": "22/09/2017",
    "delPinCode": 560056,
    "delStateCode": 29,
    "validUpto":"17/12/2017 12.00:00 PM",
    "extendedTimes":0,
   "delPlace": "Bangalore",
  "Status": "ACT",
  "rejectStatus":"Y"
      },
{   "ewbNo": 121000359898,
    "ewbDate": "10/12/2017 10:45:00 AM ",
    "genGstin": "29AAECP2371C1ZL",
    "docNo": "TA120",
    "docDate": "20/09/2017",
    "delPinCode": 560013,
    "delStateCode": 29  ,
    "validUpto":"17/12/2017 12.00:00 PM",
    "extendedTimes":0,
   "delPlace": "Bangalore",
  "Status": "ACT",
  "rejectStatus":"Y"
} ]
```

15. GET CONSOLIDATED E-WAY BILL

This method provides the Consolidated E-way bill details for a given E-way bill number.

The format and details of GetTripSheet API request is depicted in following table.

URL	http://ewaybill2.nic.in/ewaybillapi/v1.01/ewayapi/GetTripSheet
Content-Type	application/json
Method	GET
URL Parameters	tripSheetNo
URL Parameters description	tripSheetNo – Consolidated E-way bill number

Request Header

Attributes	Description
client-id	clientid to be provided by E-WAY BILL SYSTEM
client-secret	Secret to be provided by E-WAY BILL SYSTEM
gstin	GSTIN of Requester(Tax payer or Transporter)
authtoken	Authentication token returned by the E-way bill system

Response Payload

Attributes	Description	Value
status	Status of request	1 – Success ; 0 - Error
Encrypt(Base64(Response JSON),rek)	Response of Consolidated E-way bill Json string.	
Encrypt(rek,sek)	Random encryption key which is encrypted using sek	
Hmac (Base64(JSON data))	HMAC-SHA256 of Base64 data using AES key (rek) as HMAC Key	

15.1 Sample Response Json for GetTripSheet (Consolidated E-way Bill)

```
{
 "tripSheetNo": 1610005711,
 "fromPlace": "TYH",
 "fromState": "29",
 "vehicleNo": "KA12ER4344",
 "transMode": "1  ",
 "userGstin": "29BQSPA3829E1ZG",
"enteredDate": "12/12/2018 11:50:00 AM",
"transDocNo":"897",
"transDocDate":"17/12/2017",
 "tripSheetEwbBills": [
  {
    "ewbNo": 131009585893,
    "ewbDate": "10/12/2017 10:45:00 AM",
    "userGstin": "29BQSPA3829E1ZG",
    "docNo": "1012 ";
   "docDate": "10/12/2017 ";
    "assessValue": 38,
    "cgstValue": 0,
    "sgstValue": 0,
    "igstValue": 0,
    "cessValue": 0,
    "validUpto":"20/12/2017 12.00:00 PM"
  },
  {
    "ewbNo": 141009586518,
    "ewbDate": "10/12/2017 10:45:00 AM ",
    "userGstin": "29BQSPA3829E1ZG",
    "docNo": "doc45",
    "docDate": "13/12/2017",
    "assessValue": 456,
    "cgstValue": 0,
    "sgstValue": 0,
    "igstValue": 0,
    "cessValue": 0,
    "validUpto":"21/09/2017 12.00:00 PM"
  }
 ] }
```

16.   Sample Code in C#.net to integrate this API with Tax Payer System

16.1 Encryption and Decryption

Asymmetric Key Encryption (RSA)

The following C#.Net code snippet can be used for encrypting the password and the appkey using the public key given by the E-way bill System. The encryption method used here is RSA.

```csharp
public static string EncryptAsymmetric(string data, string key)
    {
        byte[] keyBytes = Convert.FromBase64String(key);
        AsymmetricKeyParameter asymmetricKeyParameter =
        PublicKeyFactory.CreateKey(keyBytes);
        RsaKeyParameters rsaKeyParameters = (RsaKeyParameters)asymmetricKeyParameter;
        RSAParameters rsaParameters = new RSAParameters();
        rsaParameters.Modulus = rsaKeyParameters.Modulus.ToByteArrayUnsigned();
        rsaParameters.Exponent = rsaKeyParameters.Exponent.ToByteArrayUnsigned();
        RSACryptoServiceProvider rsa = new RSACryptoServiceProvider();
        rsa.ImportParameters(rsaParameters);
        byte[] plaintext = Encoding.UTF8.GetBytes(data);
        byte[] ciphertext = rsa.Encrypt(plaintext, false);
        string cipherresult = Convert.ToBase64String(ciphertext);

        return cipherresult;


    }
```

Symmetric Key Encryption (AES)

The following C#.Net code snippet can be used for encrypting the data using the symmetric key.

```csharp
public static string EncryptBySymmetricKey(string text, string sek)
    {
        //Encrypting SEK
        try
        {
            byte[] dataToEncrypt = Convert.FromBase64String(text);
            var keyBytes = Convert.FromBase64String(sek);
            AesManaged tdes = new AesManaged();
            tdes.KeySize = 256;
            tdes.BlockSize = 128;
            tdes.Key = keyBytes;
            tdes.Mode = CipherMode.ECB;
            tdes.Padding = PaddingMode.PKCS7;
            ICryptoTransform encrypt__1 = tdes.CreateEncryptor();
            byte[] deCipher = encrypt__1.TransformFinalBlock(dataToEncrypt, 0,
dataToEncrypt.Length);
            tdes.Clear();

            string EK_result = Convert.ToBase64String(deCipher);
```

```
            return EK_result;


        }
        catch (Exception ex)
        {
            throw ex;
        }
    }
```

Symmetric Decryption (AES)

The following C#.Net code snippet can be used for decrypting the encrypted string using the key.

```
public static byte[] DecryptBySymmetricKey(string encryptedText, byte[] key)
    {
        //Decrypting SEK
        try
        {
            byte[] dataToDecrypt = Convert.FromBase64String(encryptedText);
            var keyBytes = key;
            AesManaged tdes = new AesManaged();
            tdes.KeySize = 256;
            tdes.BlockSize = 128;
            tdes.Key = keyBytes;
            tdes.Mode = CipherMode.ECB;
            tdes.Padding = PaddingMode.PKCS7;
            ICryptoTransform decrypt__1 = tdes.CreateDecryptor();
            byte[] deCipher = decrypt__1.TransformFinalBlock(dataToDecrypt, 0,
dataToDecrypt.Length);
            tdes.Clear();

            string EK_result = Convert.ToBase64String(deCipher);
            return EK_result;
        }
        catch (Exception ex)
        {
            throw ex;
        }
    }
```

16.2   Sample code to generate Access token

Public void GetAuthToken()

Step 1: Get the public key from the file stored in the folder and remove the string "-----BEGIN PUBLIC KEY-----" at the start and "-----END PUBLIC KEY-----" at the end

```
{
using (var reader = File.OpenText(@"D:\ConsumeEwayBillAPI\ewaybill_publickey.pem"))
public_key = reader.ReadToEnd().Replace("-----BEGIN PUBLIC KEY-----","").Replace("-----END PUBLIC KEY-----","").Replace("\n","");
```

Step 2: Create Http request object with headers and payload to consume authentication API

```
HttpWebRequest request =
(HttpWebRequest)WebRequest.Create ("http://ewaybill2.nic.in/ewaybillapi/v1.01/Authenticate");
request.Method = "POST";
request.KeepAlive = true;
request.AllowAutoRedirect = false;
request.Accept = "*/*";
```

Step 3: Set the client-id , client secret as given by E-way bill system, and set your GSTIN

```
request.ContentType = "application/json";
request.Headers.Add("client-id", "test_clientid");
request.Headers.Add("client-secret", "test_client_secret");
request.Headers.Add("gstin", "testgstin");
```

Step 4: Encrypt the password using the Public key of the E-way bill system. This will be the encrypted password.

```
string encPassword = Encrypt("testpwd", public_key);
```

Step 5: Create a secure key by calling random function and convert the same to Base64. Encrypt the secure key by the Public key of the E-way bill system. This will be the encrypted app key.

```
byte[] _aeskey = encdec.generateSecureKey(); //common.RandomString(32); //
string straesKey = Convert.ToBase64String(_aeskey);
string encAppKey = encdec.Encrypt(_aeskey, public_key);
```

Step 6: Set the action as 'ACCESSTOKEN'. Set the username as given by the E-way bill system to you. Set the Encrypted password (previously generated). Set the Encrypted App key (previously generated)

```
RequestPayload aRequestPayload = new RequestPayload();
aRequestPayload.action = "ACCESSTOKEN";
```

```
aRequestPayload.username = "testacc";
aRequestPayload.password = encPassword;
aRequestPayload.app_key = encAppKey;
```

Step 7: Post the API request and receive the response for auth token

```
JavaScriptSerializer serial1 = new JavaScriptSerializer();
using (var streamWriter = new StreamWriter(request.GetRequestStream()))
    {
        string json = serial1.Serialize(aRequestPayload);
        streamWriter.Write(json);
        streamWriter.Flush();
        streamWriter.Close();
    }
    WebResponse response = request.GetResponse();
    string result = new StreamReader(response.GetResponseStream()).ReadToEnd();
    AuthResponse objresp = new AuthResponse();
    objresp = serial1.Deserialize <AuthResponse> (result);
    string decryptedappkey = encdec.DecryptSymmetric(objresp.sek, straesKey);

}
```

16.3 Sample code to generate E-way Bill

Public GeneratedEwayBill()

Step 1: Prepare the request object by setting the URL, client-id, client secret, GSTIN, and Auth token received from the previous API.

```
{
    HttpWebRequest request =
    (HttpWebRequest)WebRequest.Create("http://ewaybill2.nic.in/ewaybillapi/v1.01/EwayApi");
    request.Method = "POST";
    request.KeepAlive = true;
    request.AllowAutoRedirect = false;
    request.Accept = "*/*";
    request.ContentType = "application/json";
    request.Headers.Add("client-id", "TESTCLIENTID");
    request.Headers.Add("client-secret", "CLIENTSECRET");
    request.Headers.Add("gstin", "29AAACGIIIII1Z3");
    request.Headers.Add("authtoken", "0aAjBKdo7rcNYJB30g5DS2u8z");
```

Step 2: Prepare the JSON string with all parameters. Post the request and receive the response. Refer the annexure for the parameter details.

```
    ewayapi.Entities.EwayBillApiRequest ewbReq = new
    ewayapi.Entities.EwayBillApiRequest();
    ewbReq.action = "GENEWAYBILL";
  //Serialised JSON Data
string jsonData = \"supplyType\":\"O\",\"subSupplyType\":\"1\",\"docType\":\"INV\",\"docNo\":\"123-
8\",\"docDate\":\"15/12/2017,\"fromGstin\":\"29AAACG0569P1Z3\",\"fromTrdName\":\"welton\",\"fromAd
dr1\":\"2ND CROSS NO 59  19  A\",\"fromAddr2\":\"GROUND FLOOR OSBORNE
ROAD\",\"fromPlace\":\"FRAZER
TOWN\",\"fromPincode\":560042,\"fromStateCode\":29,\"toGstin\":\"02EHFPS5910D2Z0\",\"toTrdName\":
\"sthuthya\",\"toAddr1\":\"Shree Nilaya\",\"toAddr2\":\"Dasarahosahalli\",\"toPlace\":\"Beml
Nagar\",\"toPincode\":689788,\"toStateCode\":28,\"totalValue\":5609889,\"cgstValue\":0,\"sgstValue\":0,\"
igstValue\":168296.67,\"cessValue\":224395.56,\"transporterId\":\"\",\"transporterName\":\"\",\"transDoc
No\":\"\",\"transMode\":\"1\",\"transDistance\":\"656\",\"transDocDate\":\"\",\"noOfTransDays\":0,\"vehic
leNo\":\"PVC1234\",\"itemList\":[{\"ewbNo\":0,\"itemNo\":0,\"productName\":\"Wheat\",\"productDesc\":
\"Wheat\",\"hsnCode\":1001,\"quantity\":4,\"qtyUnit\":\"BOX\",\"cgstRate\":0,\"sgstRate\":0,\"igstRate\":3
,\"cessRate\":4,\"cessAdvol\":0,\"taxableAmount\":5609889}]}";
ewbReq.data =
encdec.EncryptBySymmetricKey(Convert.ToBase64String(System.Text.Encoding.UTF8.Ge
tBytes(jsonData)), sek);
    using (var streamWriter = new StreamWriter(request.GetRequestStream()))
    {
      string json = serial1.Serialize(ewbReq);
      streamWriter.Write(json);
      streamWriter.Flush();
      streamWriter.Close();
    }
    WebResponse response = request.GetResponse();
    string result = new StreamReader(response.GetResponseStream()).ReadToEnd();
    serial1 = new JavaScriptSerializer();
```

Step 3: Receive the response. Decrypt using sek and Decode the Base 64 string to plain text

```
    ewayapi.Entities.EwayBillApiResponse ewbres =
    serial1.Deserialize<ewayapi.Entities.EwayBillApiResponse>(result);
        string data = encdec.DecryptBySymmetricKey(ewbres.data,
Convert.FromBase64String(sek));
        yte[] reqDatabytes = Convert.FromBase64String(data);
    string requestData = System.Text.Encoding.UTF8.GetString(reqDatabytes);}
```

16.4   Sample code to update Vehicle

```
Public void UpdateVehicle

{

    HttpWebRequest request = (HttpWebRequest)WebRequest
.Create("http:// ewaybill2.nic.in/ewaybillapi/EwayApi");
    request.Method = "POST";
    request.KeepAlive = true;
    request.AllowAutoRedirect = false;
    request.Accept = "*/*";
    request.ContentType = "application/json";
    request.Headers.Add("client-id", "TESTCLIENTID");
    request.Headers.Add("client-secret", "CLIENTSECRET");
    request.Headers.Add("gstin", "29AAACGIIIII1Z3");
    request.Headers.Add("authtoken", "0aAjBKdo7rcNYJB30g5DS2u8z");
    ewayapi.Entities.EwayBillApiRequest ewbReq = new
                     ewayapi.Entities.EwayBillApiRequest();
    ewbReq.action = "VEHEWB";
    JavaScriptSerializer serial1 = new JavaScriptSerializer();
string jsonData =
"{\"EwbNo\":111000609282,\"VehicleNo\":\"PQR1234\",\"FromPlace\":\"BANGALORE\",\"FromState\":29,\"
ReasonCode\":\"1\",\"ReasonRem\":\"vehicle broke down\", \"TransMode\":\"1\",
\"TransDocNo\":\"1\",\"TransDocDate\":\"10/11/2017\"}";
```

```
    ewbReq.data =
 encdec.EncryptBySymmetricKey(Convert.ToBase64String(System.Text.Encoding.UTF8.Ge
tBytes(jsonData)), sek);
    using (var streamWriter = new StreamWriter(request.GetRequestStream()))
    {
      string json = serial1.Serialize(ewbReq);
      streamWriter.Write(json);
      streamWriter.Flush();
      streamWriter.Close();
    }
    WebResponse response = request.GetResponse();
    string result = new StreamReader(response.GetResponseStream()).ReadToEnd();
    serial1 = new JavaScriptSerializer();
```

Step 3: Receive the response. Decrypt and Decode the Base 64 string to plain text

```
    ewayapi.Entities.EwayBillApiResponse ewbres =
    serial1.Deserialize<ewayapi.Entities.EwayBillApiResponse>(result);
```

```
        string data = encdec.DecryptBySymmetricKey(ewbres.data,
Convert.FromBase64String(sek));
        yte[] reqDatabytes = Convert.FromBase64String(data);
    string requestData = System.Text.Encoding.UTF8.GetString(reqDatabytes);}
}
```

16.5   Sample code to Generate Consolidated Eway bill

```
Public void GenerateConsolidatedEwb()

{

    HttpWebRequest request = (HttpWebRequest)WebRequest
. Create("http:// ewaybill2.nic.in/ewaybillapi/EwayApi");
    request.Method = "POST";
    request.KeepAlive = true;
    request.AllowAutoRedirect = false;
    request.Accept = "*/*";
    request.ContentType = "application/json";
    request.Headers.Add("client-id", "TESTCLIENTID");
    request.Headers.Add("client-secret", "CLIENTSECRET");
    request.Headers.Add("gstin", "29AAACGIIIII1Z3");
    request.Headers.Add("authtoken", "0aAjBKdo7rcNYJB30g5DS2u8z");
    ewayapi.Entities.EwayBillApiRequest ewbReq = new
                    ewayapi.Entities.EwayBillApiRequest();
    ewbReq.action = "GENCEWB";
    JavaScriptSerializer serial1 = new JavaScriptSerializer();

    string jsonData = "{\"fromPlace\":\"BANGALORE
        SOUTH\",\"fromState\":\"29\",\"vehicleNo\":\"KA12AB1234\",\"transMode\":\"1\",
        \"TransDocNo\":\"1\",\"TransDocDate\":\"10/11/2017\",
        \"tripSheetEwbBills\":[{\"ewbNo\":111000609282},{\"ewbNo\":181000609270}]}";
```

```
ewbReq.data =
 encdec.EncryptBySymmetricKey(Convert.ToBase64String(System.Text.Encoding.UTF8.Ge
tBytes(jsonData)), sek);
    using (var streamWriter = new StreamWriter(request.GetRequestStream()))
    {
        string json = serial1.Serialize(ewbReq);
        streamWriter.Write(json);
        streamWriter.Flush();
        streamWriter.Close();
    }
    WebResponse response = request.GetResponse();
    string result = new StreamReader(response.GetResponseStream()).ReadToEnd();
    serial1 = new JavaScriptSerializer();
```

```
  Step 3: Receive the response. Decrypt using sek and Decode the Base 64
  string to plain text
    ewayapi.Entities.EwayBillApiResponse ewbres =
    serial1.Deserialize<ewayapi.Entities.EwayBillApiResponse>(result);
        string data = encdec.DecryptBySymmetricKey(ewbres.data,
Convert.FromBase64String(sek));
        yte[] reqDatabytes = Convert.FromBase64String(data);
    string requestData = System.Text.Encoding.UTF8.GetString(reqDatabytes);}
```

```
}
```

16.6 Sample code to Cancel Eway bill

```
Public void CancelEwayBill()

    {

    HttpWebRequest request =
(HttpWebRequest)WebRequest.Create("http://ewaybill2.nic.in/ewaybillapi/v1.01/EwayApi");
    request.Method = "POST";

    /*Optional*/
    request.KeepAlive = true;
    request.AllowAutoRedirect = false;
    request.Accept = "*/*";
    request.ContentType = "application/json";
    request.Headers.Add("client-id", "TESTCLIENTID");
    request.Headers.Add("client-secret", "CLIENTSECRET");
    request.Headers.Add("gstin", "29AAACGIIIII1Z3");
    request.Headers.Add("authtoken", "0aAjBKdo7rcNYJB30g5DS2u8z");
    ewayapi.Entities.EwayBillApiRequest ewbReq = new
    ewayapi.Entities.EwayBillApiRequest();
    ewbReq.action = "CANEWB";
        JavaScriptSerializer serial1 = new JavaScriptSerializer();

        string jsonData = "{\"ewbNo\":111000609282,\"cancelRsnCode\":2,\"cancelRmrk\":\"Cancelled the
order\"}";
```

```
ewbReq.data = encdec. EncryptBySymmetricKey
(Convert.ToBase64String(System.Text.Encoding.UTF8.GetBytes(jsonData)), sek);
    using (var streamWriter = new StreamWriter(request.GetRequestStream()))
    {
      string json = serial1.Serialize(ewbReq);
      streamWriter.Write(json);
      streamWriter.Flush();
      streamWriter.Close();
    }
    WebResponse response = request.GetResponse();
    string result = new StreamReader(response.GetResponseStream()).ReadToEnd();
    serial1 = new JavaScriptSerializer();


  Step 3: Receive the response. Decrypt and Decode the Base 64 string to plain
  text
    ewayapi.Entities.EwayBillApiResponse ewbres =
    serial1.Deserialize<ewayapi.Entities.EwayBillApiResponse>(result);
string data = encdec.DecryptBySymmetricKey(ewbres.data,
 Convert.FromBase64String(sek));
yte[] reqDatabytes = Convert.FromBase64String(data);
    string requestData = System.Text.Encoding.UTF8.GetString(reqDatabytes);}
```

```
}
```

16.7 Sample code to Reject Eway bill

```csharp
Public void RejectEwayBill()

{

HttpWebRequest request =
(HttpWebRequest)WebRequest.Create("http://ewaybill2.nic.in/ewaybillapi/v1.01/EwayApi");
    request.Method = "POST";

    /*Optional*/
    request.KeepAlive = true;
    request.AllowAutoRedirect = false;
    request.Accept = "*/*";
    request.ContentType = "application/json";
   request.Headers.Add("client-id", "TESTCLIENTID");
   request.Headers.Add("client-secret", "CLIENTSECRET");
   request.Headers.Add("gstin", "29AAACGIIIII1Z3");
   request.Headers.Add("authtoken", "0aAjBKdo7rcNYJB30g5DS2u8z");
    ewayapi.Entities.EwayBillApiRequest ewbReq = new ewayapi.Entities.EwayBillApiRequest();
    ewbReq.action = "REJEWB";
    JavaScriptSerializer serial1 = new JavaScriptSerializer();
    string jsonData = = "{\"ewbNo\":111000609282}";
 ewbReq.data = encdec. EncryptBySymmetricKey
 (Convert.ToBase64String(System.Text.Encoding.UTF8.GetBytes(jsonData)), sek);
     using (var streamWriter = new StreamWriter(request.GetRequestStream()))
     {
       string json = serial1.Serialize(ewbReq);
       streamWriter.Write(json);
       streamWriter.Flush();
       streamWriter.Close();
     }
    WebResponse response = request.GetResponse();
    string result = new StreamReader(response.GetResponseStream()).ReadToEnd();
       serial1 = new JavaScriptSerializer();
    ewayapi.Entities.EwayBillApiResponse ewbres =
    serial1.Deserialize<ewayapi.Entities.EwayBillApiResponse>(result);
        string data = encdec. DecryptBySymmetricKey (ewbres.data,
Convert.FromBase64String(sek));
        yte[] reqDatabytes = Convert.FromBase64String(data);
     string requestData = System.Text.Encoding.UTF8.GetString(reqDatabytes);}

}
```

16.8   Sample code for Get Methods

```csharp
Public void GetEwayBill()

{

HttpWebRequest request =
(HttpWebRequest)WebRequest.Create("http://ewaybill2.nic.in/ewaybillapi/v1.01/EwayApi/GetEwayBill?ewbNo=191000001846");

request.Method = "GET";

  request.KeepAlive = true;
  request.AllowAutoRedirect = false;
  request.Accept = "*/*";
```

```csharp
request.ContentType = "application/json";
request.Headers.Add("client-id", "TESTCLIENTID");
request.Headers.Add("client-secret", "CLIENTSECRET");
request.Headers.Add("gstin", "29AAACGIIIII1Z3");
request.Headers.Add("authtoken", "0aAjBKdo7rcNYJB30g5DS2u8z");
WebResponse response = request.GetResponse();
string result = new StreamReader(response.GetResponseStream()).ReadToEnd();
JavaScriptSerializer serial1 = new JavaScriptSerializer();
        ewayapi.Entities.EwayBillApiResponseForGet ewbres =
serial1.Deserialize<ewayapi.Entities.EwayBillApiResponseForGet>(result);
     string rek = encdec.DecryptBySymmetricKey (ewbres.rek,
Convert.FromBase64String(sek));
     string data = encdec.DecryptBySymmetricKey (ewbres.data,
Convert.FromBase64String(rek));
     byte[] reqDatabytes = Convert.FromBase64String(data);
               //byte[] reqDatabytes = Convert.FromBase64String(ewbres.data);
string requestData = System.Text.Encoding.UTF8.GetString(reqDatabytes);
          //string hmac = encdec.GenerateHMAC(requestData,
Convert.FromBase64String(rek));
string hmac = encdec.GenerateHMAC(data, Convert.FromBase64String(rek));
if (ewbres.hmac == hmac){
          }

}
```

Sample Code in Java to integrate this API with Tax Payer System

16.1 Encryption and Decryption

Asymmetric Encryption (RSA)

The following Java code snippet can be used for encrypting the password and the appkey using the public key given by the E-way bill System. The encryption method used here is RSA.

```java
public static String encryptAsymmetricKey(String pubkey, String password) throws
Exception{

        PublicKey publicKeys = convertPubStringToKey(pubkey);
        Cipher cipher = Cipher.getInstance("RSA/ECB/PKCS1PADDING");
        cipher.init(Cipher.ENCRYPT_MODE, publicKeys);
        byte[] encryptedText = cipher.doFinal(password.getBytes());
        String encryptedPassword = Base64.encodeBase64String(encryptedText);
        return encryptedPassword;
    }
```

```java
private static PublicKey convertPubStringToKey(String publikkey)
{
        PublicKey pubKey = null;
        byte[] publicBytes =  Base64.decodeBase64(publikkey);
        X509EncodedKeySpec keySpec = new X509EncodedKeySpec(publicBytes);
        KeyFactory keyFactory;
        try {
            keyFactory = KeyFactory.getInstance("RSA");
            pubKey = keyFactory.generatePublic(keySpec);
        } catch (Exception e)
        {
        e.printStackTrace();
        }
        return pubKey;
}
```

```java
public static String encryptAsymmetricKey(String pubkey, byte[] appKey) throws Exception
{
        PublicKey publicKeys = covertPubStringToKey(pubkey);
            Cipher cipher = Cipher.getInstance("RSA/ECB/PKCS1PADDING");
            cipher.init(Cipher.ENCRYPT_MODE, publicKeys);
            byte[] encryptedText = cipher.doFinal(appKey);
            String encryptedAppKey = Base64.encodeBase64String(encryptedText);
            return encryptedAppKey;
}
```

Symmetric Key Encryption using Java

```java
private static String encryptBySymmetricKey(String json, String decryptedSek)
{
        byte[] sekByte = Base64.decodeBase64(decryptedSek);
        Key aesKey = new SecretKeySpec(sekByte, "AES");
        try {

                Cipher cipher = Cipher.getInstance("AES/ECB/PKCS5Padding");
                cipher.init(Cipher.ENCRYPT_MODE, aesKey);
                byte[] encryptedjsonbytes = cipher.doFinal(json.getBytes());
                String encryptedJson = Base64.encodeBase64String(encryptedjsonbytes);
               return encryptedJson;


        }
        catch(Exception e) {
                return "Exception "+e;


        }
}
```

Symmetric Key Decryption using Java

```java
public static String decrptyBySyymetricKey(String encryptedSek, byte[] appKey)
 {
     Key aesKey = new SecretKeySpec(appKey, "AES"); // converts bytes(32 byte random generated) to key
     try {
             Cipher cipher = Cipher.getInstance("AES/ECB/PKCS5Padding");  // encryption type = AES with padding PKCS5
             cipher.init(Cipher.DECRYPT_MODE, aesKey); // initiate decryption type with the key
             byte[] encryptedSekBytes = Base64.decodeBase64(encryptedSek); // decode the base64 encryptedSek to bytes
             byte[] decryptedSekBytes = cipher.doFinal(encryptedSekBytes); // decrypt the encryptedSek with the initialized
cipher containing the key(Results in bytes)
String decryptedSek = Base64.encodeBase64String(decryptedSekBytes); // convert the decryptedSek(bytes) to Base64
StriNG

 return decryptedSek;  // return results in base64 string
 }catch(Exception e)
{
 return "Exception; "+e;
 }
 }
```

Annexure -A : Data Structure Specification – A1 E-way Bill Generation

Parameter Name	Type	Description	Values	Sample Data	Allowed character
userGstin	Text (15)	GSTIN of API User		29ACGPI2251 K1ZJ	Alphanum
supplyType	Text(1)	Supply whether it is outward/inward.	Refer Code List	O	
subSupplyType	Number(2)	Sub types of Supply	Refer Code List	2	
docType	Text(3)	Document Type	Refer Code List	CHL	
docNo	Text(50)	Document No		12	Alphanum, -, /
docDate	Text	Document Date	dd/mm/yy yy format	12/09/2017	
fromGstin	Text(15)	GSTIN of the Consignor		29AAAAA0300 L1Z8	Alphanum
fromTrdName	Text(100)	LegalName of consignor		ABHYUDHYA CO OP BANK	Alphanumeri c
fromAddr1	Text(120)	Address of consignor - Line 1		Shambhai Fortune	Alphanumeri c
fromAddr2	Text(120)	Address of consignor - Line 2		Behind KSRTC Bus Stop	Alphanumeri c
fromPlace	Text(50)	Place of consignor		Bengaluru	Alphabetic
fromPincode	Number(6)	Pincode of consignor		576101	Number
fromStateCode	Number(2)	State of consignor	Refer Code List	29	
toGstin	Text(15)	GSTIN of consignee		29ACGPI2251 K1ZJ	Alphanumeri c
toTrdname	Text(100)	Legalname of consignee		INDER CHHAJER	Alphanumeri c
toAddr1	Text(120)	Address of consignee - Line 1		PRIYADARSHA NI LAYOUT	Alphanumeri c
toAddr2	Text(120)	Address of consignee- Line 2		MUDALAYAPA LYA	Alphanumeri c
toPlace	Text(50)	Place of consignee		Bengaluru	Alphabetic
toPincode	Number(6)	Pincode of the consignee		560072	Number
toStateCode	Number(2)	State of Supply	Refer Code List	4	
totalValue	Decimal(18,2)	Total Amount/ Taxable Amount		2000	

cgstValue	Decimal(18,2)	CGST Amount		0	
sgstValue	Decimal(18,2)	SGST Amount		0	
igstValue	Decimal(18,2)	IGST Amount		240	
cessValue	Decimal(18,2)	CESS Amount		20	
transMode	Number(1)	Mode of transportation	Refer Code List	1	
VehicleType	Char(1)	Type of Vehcile	R or O	R	
transDistance	Number(5)	Distance of transportation		10	Max Value = 4000
transporterId	Text(15)	Transporter Id		29BQSPA3829 E1Z0	
transporterName	Text(100)	Transporter Name		TAPURI	
transDocNo	Text(15)	Transporter Doc No		11	
transDocDate	Text	Transporter Doc Date	dd/mm/yy yy format	13/09/2017	
vehicleNo	Text(10)	Vehicle No.	Pl refer Code List	KA12BL4567	Vehicle No. to begin with state code as given in the Code list
productName	Text(100)	Name of the Product		Steel	
productDesc		Description of the Product		5mm Rod	
hsnCode	Number(8)	HSN Code of the Product		10101	
quantity	Decimal(8,2)	Quantity of Product in Numbers		QTS	
qtyUnit	Text(3)	Unit of the Product, like Liter,Kg etc	Refer Code List	200	
taxableAmount	Decimal(18,2)	Total Amount/ Taxable Amount		100000	
cgstRate	Decimal(6,3)	CGST Rate		9	
sgstRate	Decimal(6,3)	SGST Rate		9	
igstRate	Decimal(6,3)	IGST Rate		18	
cessRate	Decimal(6,3)	CESS Rate		0	
Status	Number(1)	Status code	1-Success, 0 - Fail		
errorCodes	Text(200)	Refer Error Codes			
docNo	Text(50)	Document number of EwayBill			

ewayBillNo	Number(12)	Unique E-Way Bill No			
ewayBillDate	Text(22)	Date and Time of E-Way Bill Generation	dd/mm/yyyy hh:mm:ss AM/PM		

Annexure -A2 : Consolidated E-way bill generation

Parameter Name	Type	Description	Values	Sample Data	Allowed character
vehicleNo	Text(20)	vehicle number		KA12AP1235	Alpha-numeric
fromPlace	Text(50)	from place of consignor		Rajasthan	Alphabetic
transMode	Number(3)	Mode of Transportation	Refer Code list	2	Number
transDocNo	Text(50)	Transporter Document number		12-86/3	Alphanumeric, -, /
transDocDate	Text	Transporter Document Date	dd/mm/yyyy format	12/09/2017	
fromState	Number(2)	State of Consignor	Refer Code list	8	
tripSheetEwbBills		List of eway bills			
ewbNo	Number(20)	E-way bill Number generated		345654565456	Number

Annexure -A3: Update Vehicle number

Parameter Name	Type	Description	Values	Sample Data	Allowed character
EwbNo	Number(12)	E-way bill Generated		131000026768	Numbers
VehicleNo	Text(20)	Vehicle number		KA12TR1234	Alpha-numeric
FromPlace	Text(50)	Place of Consignor		BANGALORE SOUTH	Alpha-numeric
FromState	Number(2)	State of Consignor	Refer Code list	29	Numbers
ReasonCode	Number(1)	Reason code for vehicle updation	Refer Code list	2	Numbers
	Text(50)	Reason for Vehicle		Vehicle details	Alpha-numeric

ReasonRem		Updation		updated	
TransDocNo	Text(50)	Transporter Document number		12-86/3	Alphanumeric, -, /
TransDocDate	Text	Transporter Document Date	dd/mm/yy yy format	12/09/2017	
TransMode	Number(1)	Mode of Transport	Refer Code list	1	Numbers

Annexure -A4: Cancel E-way bill

Parameter Name	Type	Description	Values	Sample Data	Allowed character
ewbNo	Number(12)	E-way bill Generated		131000026768	Numbers
cancelRsnCode	Number(1)	Reason code for cancelling eway bill	Refer Code list	2	Numbers
cancelRmrk	Text(50)	Reason for - cancelling eway bill		Vehicle details not updated	Alpha-numeric

Annexure A5- Reject e-way bill

Parameter Name	Type	Description	Values	Sample Data	Allowed character
ewbNo	Number(12)	E-way bill Generated		131000026768	Numbers

Annexure B – Master codes List

Master Name	Code	Description
Supply Type	I	Inward
	O	Outward
Sub Supply Type	1	Supply
	2	Import
	3	Export
	4	Job Work
	5	For Own Use
	6	Job work Returns
	7	Sales Return
	8	Others
	9	SKD/CKD
	10	Line Sales
	11	Recipient Not Known
	12	Exhibition or Fairs
Document Type	INV	Tax Invoice
	BIL	Bill of Supply
	BOE	Bill of Entry
	CHL	Delivery Challan
	CNT	Credit Note
	OTH	Others
Transportation Mode	1	Road
	2	Rail
	3	Air
	4	Ship
Unit	BAG	BAGS
	BAL	BALE
	BDL	BUNDLES
	BKL	BUCKLES
	BOU	BILLION OF UNITS
	BOX	BOX
	BTL	BOTTLES

	BUN	BUNCHES
	CAN	CANS
	CBM	CUBIC METERS
	CCM	CUBIC CENTIMETERS
	CMS	CENTI METERS
	CTN	CARTONS
	DOZ	DOZENS
	DRM	DRUMS
	GGK	GREAT GROSS
	GMS	GRAMMES
	GRS	GROSS
	GYD	GROSS YARDS
	KGS	KILOGRAMS
	KLR	KILOLITRE
	KME	KILOMETRE
	MLT	MILILITRE
	MTS	METRIC TON
	NOS	NUMBERS
	OTH	OTHERS
	PAC	PACKS
	PCS	PIECES
	PRS	PAIRS
	QTL	QUINTAL
	ROL	ROLLS
	SET	SETS
	SQF	SQUARE FEET
	SQM	SQUARE METERS
	SQY	SQUARE YARDS
	TBS	TABLETS
	TGM	TEN GROSS
	THD	THOUSANDS
	TON	TONNES
	TUB	TUBES
	UGS	US GALLONS
	UNT	UNITS
	YDS	YARDS

State Code		
	1	JAMMU AND KASHMIR
	2	HIMACHAL PRADESH
	3	PUNJAB
	4	CHANDIGARH
	5	UTTARAKHAND
	6	HARYANA
	7	DELHI
	8	RAJASTHAN
	9	UTTAR PRADESH
	10	BIHAR
	11	SIKKIM
	12	ARUNACHAL PRADESH
	13	NAGALAND
	14	MANIPUR
	15	MIZORAM
	16	TRIPURA
	17	MEGHALAYA
	18	ASSAM
	19	WEST BENGAL
	20	JHARKHAND
	21	ORISSA
	22	CHHATTISGARH
	23	MADHYA PRADESH
	24	GUJARAT
	25	DAMAN AND DIU
	26	DADAR AND NAGAR HAVELI
	27	MAHARASTRA
	37	ANDHRA PRADESH
	29	KARNATAKA
	30	GOA
	31	LAKSHADWEEP
	32	KERALA
	33	TAMIL NADU
	34	PONDICHERRY
	35	ANDAMAN AND NICOBAR
	36	TELANGANA
	97	OTHER TERRITORY
	99	OTHER COUNTRY
Vehicle Update Reason Code	1	Due to Break Down

	2	Due to Transhipment
	3	Others (Pls. Specify)
	4	First Time
Mode of generation code	API	Application Programming Interface
	Exc	Bulk Upload
	SMS	SMS Facility
	APP	Mobile APP
	WEB	Web based system
Valid Formats of Vehicle Numbers		AB121234 (First 2 char areState Code)
		AB12A1234 (First 2 char are State Code)
		AB12AB1234 (First 2 char are State Code)
		ABC1234
		AB123A1234 (First 2 char areState Code)
		DFXXXXXX (Defence Vehicle)
		TRXXXXXXXXXXXXX (Temp RC) Atleast 5 characters
		BPXXXXXXXXXXXXX (Bhutan Vehicle) Atleast 5 characters
		NPXXXXXXXXXXXXX (Nepal Vehicle) Atleast 5 characters
E-way Bill Status	ACT	Active
	CNL	Cancelled
Cancellation -Reason Codes	1	Duplicate
	2	Order Cancelled
	3	Data Entry mistake
	4	Others

Annexure C – API Error codes List

Error Code	Error Description
100	Invalid Json
101	Invalid Username
102	Invalid Password
103	Invalid Client -Id
104	Invalid Client -Id
105	Invalid Token
106	Token Expired
107	Authentication failed. Pls. inform the helpdesk
108	Invalid login credentials.
109	Decryption of data failed
110	Invalid Client-ID/Client-Secret
111	GSTIN is not registered to this GSP
201	Invalid Supply Type
202	Invalid Sub-supply Type
203	Sub-transaction type does not belongs to transaction type
204	Invalid Document type
205	Document type does not match with transaction & Sub trans type
206	Invalid Invoice Number
207	Invalid Invoice Date
208	Invalid Supplier (FROM) GSTIN
209	Blank Supplier (FROM) Address
210	Invalid or Blank Supplier(FROM) PIN Code
211	Invalid or Blank Supplier (FROM) state Code
212	Invalid Consignee (TO) GSTIN
213	Invalid Consignee(TO) Address
214	Invalid Consignee (TO) PIN Code
215	Invalid Consignee (TO) State Code
216	Invalid HSN Code
217	Invalid UQC Code
218	Invalid Tax Rate for Intra State Transaction
219	Invalid Tax Rate for Inter State Transaction
220	Invalid Transportation mode
221	Invalid Approximate Distance
222	Invalid Transporter Id
223	Invalid Transport Document Number
224	Invalid Transport Date
225	Invalid Vehicle Number Format
226	Both Transport and Vehicle Number Blank

227	User (Generator) Gstin cannot be blank
228	User id cannot be blank
229	Supplier name is required
230	Supplier place is required
231	Consignee name is required
232	Consignee place is required
233	Eway bill does not contain any items
234	Total amount/Taxable amount is mandatory
235	Tax rates for Intra state transaction is blank
236	Tax rates for Inter state transaction is blank
237	Invalid client -Id/client-secret
238	Invalid auth token
239	Invalid action
240	Could not generate eway bill, pls contact helpdesk
301	Invalid eway bill number
302	Invalid transporter mode
303	Vehicle number is required
304	Invalid vehicle format
305	Place from is required
306	Invalid from state
307	Invalid reason
308	Invalid remarks
309	Could not update vehicle details, pl contact helpdesk
311	Validity period lapsed, you cannot update vehicle details
312	This eway bill is either not generated by you or cancelled
315	Validity period lapsed, you cannot cancel this eway bill
316	Eway bill is already verified, you cannot cancel it
317	Could not cancel eway bill, please contact helpdesk
320	Invalid state to
321	Invalid place to
322	Could not generate consolidated eway bill
325	Could not retrieve data
326	Could not retrieve GSTIN details for the given GSTIN number
327	Could not retrieve data from hsn
328	Could not retrieve transporter details from gstin
329	Could not retrieve States List
330	Could not retrieve UQC list
331	Could not retrieve Error code
334	Could not retrieve user details by userid
336	Could not retrieve transporter data by gstin
337	Could not retrieve HSN details for the given HSN number

350	Could not generate consolidated eway bill
357	Could not retrieve eway bill details, pl. contact helpdesk
358	GSTIN passed in request header is not matching with the user gstin mentioned in payload JSON
359	User GSTIN should match to GSTIN(from) for outward transactions
360	User GSTIN should match to GSTIN(to) for inward transactions
361	Invalid Vehicle Type
362	Transporter document date cannot be earlier than the invoice date
363	E-way bill is not enabled for intra state movement for you state

Annexure D - JSON Schema

D.1.For Generate Ewaybill

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "properties": {
    "supplyType": {
      "type": "string",
      "maxLength": 1,
      "minLength": 1,
          "enum": [ "O","I" ],
      "description": "Supply Type"
    },
    "subSupplyType": {
      "type": "string",
      "description": "Sub Supply Type"
    },
    "docType": {
      "type": "string",
          "enum": [ "INV", "CHL", "BIL","BOE","CNT","OTH" ],
      "description": "Document Type"
    },
    "docNo": {
      "type": "string",
      "maxLength": 16,
      "description": "Document Number (Alphanumeric with / and - are
allowed)"
    },
    "docDate": {
      "type": "string",
      "pattern": "[0-3][0-9]/[0-1][0-9]/[2][0][1-2][0-9]",
      "description": "Document Date"
    },
    "fromGstin": {
      "type": "string",
      "maxLength": 15,
      "minLength": 15,
      "pattern": "[0-9]{2}[A-Z]{5}[0-9]{4}[A-Z][0-9][A-Z][0-9|A-Z]",
      "description": "From GSTIN (Supplier or Consignor)"
    },
    "fromTrdName": {
      "type": "string",
      "maxLength": 100,
      "description": "From Trade Name (Consignor Trade name)"
    },
    "fromAddr1": {
      "type": "string",
      "maxLength": 120,
      "description": "From Address Line 1 (Valid Special Chars #,-,/)"
    },
    "fromAddr2": {
```

```
      "type": "string",
      "maxLength": 120,
      "description": "From Address Line 2(Valid Special Chars # , - ,/)"
    },
    "fromPlace": {
      "type": "string",
      "maxLength": 50,
      "description": "From Place"
    },
    "fromPincode": {
      "type": "integer",
      "maximum": 999999,
      "minimum": 100000,
      "description": "From Pincode"
    },
    "fromStateCode": {
      "type": "integer",
      "maximum": 99,
      "description": "From State Code"
    },
    "toGstin": {
      "type": "string",
      "maxLength": 15,
      "minLength": 15,
      "pattern": "[0-9]{2}[A-Z]{5}[0-9]{4}[A-Z][0-9][A-Z][0-9|A-Z]",
      "description": "To GSTIN (Consignee or Recipient)"
    },
    "toTrdName": {
      "type": "string",
      "maxLength": 100,
      "description": "To Trade Name (Consignee Trade name or Recipient Trade
name)"
    },
    "toAddr1": {
      "type": "string",
      "maxLength": 120,
      "description": "To Address Line 1 (Valid Special Chars #,-,/)"
    },
    "toAddr2": {
      "type": "string",
      "maxLength": 120,
      "description": "To Address Line 2 (Valid Special Chars #,-,/)"
    },
    "toPlace": {
      "type": "string",
      "maxLength": 50,
      "description": "To Place"
    },
    "toPincode": {
      "type": "integer",
      "description": "To Pincode"
    },
    "toStateCode": {
      "type": "integer",
      "maximum": 99,
      "description": "To State Code"
    },
```

```
    "totalValue": {
      "type": "number",
      "multipleOf": 0.01,
          "description": "Sum of Taxable value and Tax value"
    },
    "cgstValue": {
      "type": "number",
      "multipleOf": 0.01,
          "description": "CGST value"
    },
    "sgstValue": {
      "type": "number",
      "multipleOf": 0.01,
          "description": "SGST value"
    },
    "igstValue": {
      "type": "number",
          "multipleOf": 0.01,
          "description": "IGST value"
    },
    "cessValue": {
      "type": "number",
      "multipleOf": 0.01,
          "description": "Cess value"
    },
    "transMode": {
      "type": "string",
          "enum": ["1","2","3","4"],
      "description": "Mode of transport (Road-1, Rail-2, Air-3, Ship-4) "
    },
    "transDistance": {
      "type": "string",
      "description": "Distance (<4000 km) "
    },
    "transporterName": {
      "type": "string",
      "maxLength": 100,
      "description": "Name of the transporter"
    },
    "transporterId": {
      "type": "string",
      "description": "15 Digit Transporter GSTIN/TRANSIN"
    },
    "transDocNo": {
      "type": "string",
      "maxLength": 15,
      "description": "Transport Document Number (Alphanumeric with / and –
are allowed)"
    },
    "transDocDate": {
      "type": "string",
      "description": "Transport Document Date"
    },
    "vehicleNo": {
      "type": "string",
      "maxLength": 10,
      "description": "Vehicle Number"
```

```
    },
    "vehicleType": {
      "type": "string",
        "description": "Vehicle Type"
    },
    "itemList": {
      "type": "array",
      "items": [
        {
          "type": "object",
          "properties": {
            "productName": {
              "type": "string",
              "maxLength": 100,
              "description": "Product / Item Name"
            },
            "productDesc": {
              "type": "string",
              "maxLength": 100,
              "description": "Product / Item description"
            },
            "hsnCode": {
              "type": "number",
              "description": "HSN Code"
            },
            "quantity": {
              "type": "number",
                        "description":"Quantity"
            },
            "qtyUnit": {
              "type": "string",
              "maxLength": 3,
              "minLength": 3,
                        "description": "Unit"
            },
            "taxableAmount": {
              "type": "number",
              "multipleOf": 0.01,
                        "description":"Taxable Amount"
            },
            "sgstRate": {
              "type": "number",
              "multipleOf": 0.001,
                        "description":"SGST Rate of Tax"
            },
            "cgstRate": {
              "type": "number",
              "multipleOf": 0.001,
                          "description":"CGST Rate of Tax"
            },
            "igstRate": {
              "type": "number",
              "multipleOf": 0.001,
                          "description":"IGST Rate of Tax"
            },
            "cessRate": {
              "type": "number",
```

```
                    "multipleOf": 0.001,
                             "description":"Cess Rate of Tax"
                  }
                },
                "required": [
                  "hsnCode",
                  "taxableAmount"
                ]
            }
          ]
      }
    },
    "required": [

      "supplyType",
      "subSupplyType",
      "docType",
      "docNo",
      "docDate",
      "fromGstin",
      "fromPincode",
      "fromStateCode",
      "toGstin",
      "toPincode",
      "toStateCode",
      "transMode",
      "transDistance",
      "itemList"
    ]
}
```

D.2 Vehicle Updation
=================

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "properties": {

    "EwbNo": {
      "type": "number",
       "description":"Ewaybill Number"
        },
    "VehicleNo": {
      "type": "string",
"description":"Vehicle Number"

    },

    "FromPlace": {
      "type": "string",
      "maxLength": 50,
      "description":"From Place"
    },
    "FromState": {
      "type": "integer",
```

```
          "maximum": 99,
"description":"From State"

    },
    "ReasonCode": {
      "type": "string",
      "maxLength": 1,
      "minLength": 1,
"description":"Reason Code"

    },
    "ReasonRem": {
      "type": "string",
      "maxLength": 50,
      "description":"Remarks"

    },
    "TransDocNo": {
      "type": "string",
      "maxLength": 15,
      "description":"Transport Document Number"

    },
    "transDocDate": {
      "type": "string",
      "pattern": "[0-3][0-9]/[0-1][0-9]/[2][0][1-2][0-9]",
"description":"Transport Document Date"

    },
    "TransMode": {
      "type": "string",
"description":"Transport Mode"

    }
  },"required":[

"VehicleNo",
"FromPlace",
"FromState",
"ReasonCode",
 "ReasonRem",
"TransMode"
]

}
```

D.3 Cancellation

```
  {
"$schema": "http://json-schema.org/draft-04/schema#",
"type": "object",
"properties": {
            "ewbNo": {
                    "type": "number",
```

```
                    "description": "EwayBill Number"
            },
            "cancelRsnCode": {
                    "type": "number",
                    "description": "Reason for cancellation"
            },
            "cancelRmrk": {
                    "type": "string",
                    "description": "Remarks"
            }
    },
    "required": [
            "ewbNo",
            "cancelRsnCode"
    ]
}
```

D.4 Consolidated ewaybill
========================

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "properties": {

    "fromPlace": {
    "type": "string",
      "maxLength": 50,
      "description": "From Place"
    },
    "fromState": {
      "type": "number",
      "description": "From State"
    },
    "vehicleNo": {
    "type": "string",
      "description": "Vehicle Number"
    },
    "transMode": {
     "type": "string",
      "enum": [
        "1",
        "2",
        "3",
        "4"
      ],
      "description": "Transport Mode (Road-1,Rail-2,Air-3,Ship-4)"
    },
    "TransDocNo": {
  "type": "string",
```

```
      "maxLength": 15,
      "description": "Transport Document Number "
    },
    "TransDocDate": {
    "type": "string",
      "pattern": "[0-3][0-9]/[0-1][0-9]/[2][0][1-2][0-9]",
      "description": "Transport Document Date "
    },
    "tripSheetEwbBills": {
      "type": "array",
      "items": [
        {
          "type": "object",
          "properties": {
            "ewbNo": {
            "type": "number",
              "description": "Ewaybill Number"
            }
          },
          "required": [
            "ewbNo"
          ]
        }
      ]
    }
  },
  "required": [

    "fromPlace",
    "fromState",
    "vehicleNo",
    "transMode",
    "TransDocNo",
    "TransDocDate",
    "tripSheetEwbBills"
  ]
}
```

D.5 Reject

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "properties": {
    "ewbNo": {
      "type": "number",
"description":"EwayBill Number"
    }
  },
  "required": [

    "ewbNo"
 ]
}
```